```
=> fil reg
FILE 'REGISTRY' ENTERED AT 09:10:25 ON 19 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES:   16 AUG 2002  HIGHEST RN 444143-26-4
DICTIONARY FILE UPDATES:  16 AUG 2002  HIGHEST RN 444143-26-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l83 ide can tot

L83  ANSWER 1 OF 5  REGISTRY  COPYRIGHT 2002 ACS
RN   1118-68-9  REGISTRY
CN   Glycine, N,N-dimethyl- (6CI, 8CI, 9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   (Dimethylamino)acetic acid
CN   2-(Dimethylamino)acetic acid
CN   Dimethylglycine
CN   N,N-Dimethylaminoacetic acid
CN   N,N-Dimethylglycine
CN   N-Methylsarcosine
FS   3D CONCORD
MF   C4 H9 N O2
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, HODOC*,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PROMT, RTECS*, SPECINFO,
       SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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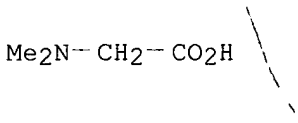

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             616 REFERENCES IN FILE CA (1967 TO DATE)
              57 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             618 REFERENCES IN FILE CAPLUS (1967 TO DATE)
              29 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE   1:  137:78865

REFERENCE   2:  137:78769

REFERENCE   3:  137:73245
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Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

REFERENCE 4: 137:63245

REFERENCE 5: 137:17423

REFERENCE 6: 137:699

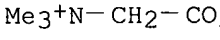
REFERENCE 7: 136:385950

REFERENCE 8: 136:365608

REFERENCE 9: 136:355074

REFERENCE 10: 136:340597

L83 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **590-46-5** REGISTRY
CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Betaine, hydrochloride (8CI)
OTHER NAMES:
CN (Carboxymethyl)trimethylammonium chloride
CN 1-Carboxy-N,N,N-trimethylmethanaminium chloride
CN Achylin
CN Acidin
CN Acidine
CN Acidogeno
CN Acidol
CN Acidol hydrochloride
CN Acinorm
CN Acipepsol
CN Aciventral forte
CN Betaine chloride
CN Glycine betaine hydrochloride
CN Glycocoll betaine hydrochloride
CN Pluchine
CN Rubrine C hydrochloride
DR 11042-13-0, 141-58-2, 125883-10-5, 67332-80-3
MF C5 H12 N O2 . Cl
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DETHERM*, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, NIOSHTIC, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
CRN (6915-17-9)



199 REFERENCES IN FILE CA (1967 TO DATE)
11 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
200 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:95266

REFERENCE 2: 137:62989

REFERENCE 3: 136:325827

REFERENCE 4: 136:74665

REFERENCE 5: 136:31680

REFERENCE 6: 136:31656

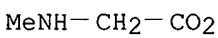
REFERENCE 7: 135:297518

REFERENCE 8: 135:242394

REFERENCE 9: 135:161601

REFERENCE 10: 135:154646

L83 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **107-97-1** REGISTRY
CN Glycine, N-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Sarcosine (8CI)**
OTHER NAMES:
CN (Methylamino)acetic acid
CN (Methylamino)ethanoic acid
CN Acetic acid, (methylamino)-
CN Methylglycine
CN N-Methylaminoacetic acid
CN N-Methylglycine
CN Sarcosin
CN Sarcosinic acid
FS 3D CONCORD
MF C3 H7 N O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2057 REFERENCES IN FILE CA (1967 TO DATE)
427 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2063 REFERENCES IN FILE CAPLUS (1967 TO DATE)
41 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114249

REFERENCE 2: 137:114239

REFERENCE 3: 137:109409

REFERENCE 4: 137:92949

REFERENCE 5: 137:63240

REFERENCE 6: 137:63136

REFERENCE 7: 137:52055

REFERENCE 8: 137:49890

REFERENCE 9: 137:47146

REFERENCE 10: 137:38714

L83 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **107-43-7** REGISTRY
CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, inner salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ammonium compounds, substituted, (carboxymethyl)trimethyl-, hydroxide, inner salt (7CI)
CN **Betaine (8CI)**
CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, hydroxide, inner salt
OTHER NAMES:
CN (Carboxymethyl)trimethylammonium hydroxide inner salt
CN (Trimethylammonio)acetate
CN .alpha.-Earleine
CN Abromine
CN Aminocoat
CN Aquadew AN 100
CN Betafin
CN Betafin BCR
CN Betafin BP
CN Cystadane
CN FinnStim
CN Glycine betaine
CN Glycine, trimethylbetaine
CN Glycocoll betaine
CN Glycylbetaine
CN Greenstim
CN Loramine AMB 13
CN Lycine
CN N,N,N-Trimethylglycine
CN Oxyneurine
CN Rubrine C
CN Trimethylglycine
CN Trimethylglycocoll
FS 3D CONCORD
DR 11042-12-9, 590-30-7, 24980-93-6, 45631-77-4
MF C5 H11 N O2
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

$Me_3^+N-CH_2-CO_2^-$

3412 REFERENCES IN FILE CA (1967 TO DATE)
537 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3419 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114511

REFERENCE 2: 137:114201

REFERENCE 3: 137:108448

REFERENCE 4: 137:106179

REFERENCE 5: 137:105978

REFERENCE 6: 137:99518

REFERENCE 7: 137:99009

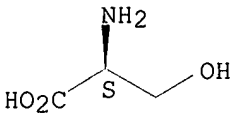
REFERENCE 8: 137:95266

REFERENCE 9: 137:91680

REFERENCE 10: 137:90665

L83 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2002 ACS
RN **56-45-1** REGISTRY
CN L-Serine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Serine, L- (8CI)
OTHER NAMES:
CN (-)-Serine
CN (S)-.alpha.-Amino-.beta.-hydroxypropionic acid
CN (S)-2-Amino-3-hydroxypropanoic acid
CN (S)-Serine
CN .beta.-Hydroxy-L-alanine
CN L-(-)-Serine
CN L-3-Hydroxy-2-aminopropionic acid
CN L-Alanine, 3-hydroxy-
CN L-Ser
CN Propanoic acid, 2-amino-3-hydroxy-, (S)-
CN Serine
FS STEREOSEARCH
DR 6898-95-9
MF C3 H7 N O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

25066 REFERENCES IN FILE CA (1967 TO DATE)
693 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
25098 REFERENCES IN FILE CAPLUS (1967 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114496

REFERENCE 2: 137:114239

REFERENCE 3: 137:114200

REFERENCE 4: 137:109469

REFERENCE 5: 137:108613

REFERENCE 6: 137:108602

REFERENCE 7: 137:108531

REFERENCE 8: 137:108497

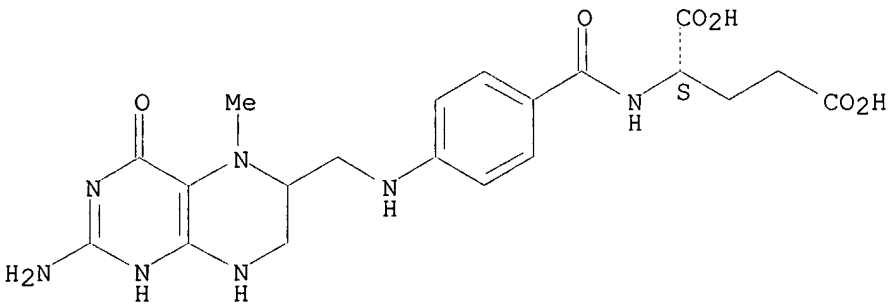
REFERENCE 9: 137:108465

REFERENCE 10: 137:108462

=> d l85 ide can tot

L85 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **139418-88-5** REGISTRY
CN L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, calcium salt (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H25 N7 O6 . x Ca
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (134-35-0)

Absolute stereochemistry.



●x Ca

5 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 136:11204

REFERENCE 2: 135:357075

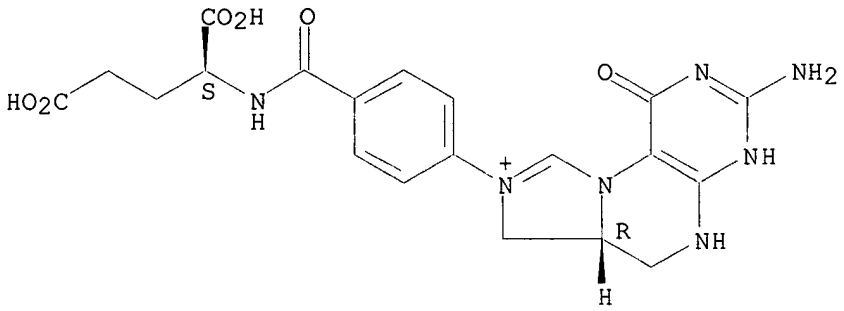
REFERENCE 3: 132:326081

REFERENCE 4: 132:326078

REFERENCE 5: 116:129615

L85 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **10360-12-0** REGISTRY
CN **Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1S)-1,3-dicarboxypropyl]amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-, (6aR)- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[(1,3-dicarboxypropyl)amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-**
CN Imidazo[1,5-f]pteridinium, 3-amino-8-[p-[(1,3-dicarboxypropyl)carbamoyl]phenyl]-5,6,6a,7-tetrahydro-1-hydroxy- (8CI)
OTHER NAMES:
CN 5,10-Methenyltetrahydrofolic acid
CN Folic acid, tetrahydro-N9,N10-methylidyne-
CN N5,N10-Methenyltetrahydrofolic acid
FS STEREOSEARCH
DR 16531-85-4, 102274-60-2, 65981-92-2, 73611-11-7, 88830-88-0, 40245-00-9, 49553-77-7
MF **C20 H22 N7 O6**
CI COM
LC STN Files: AGRICOLA, CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



80 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
80 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:114515

REFERENCE 2: 136:345818

REFERENCE 3: 136:107523

REFERENCE 4: 136:11204

REFERENCE 5: 136:4848

REFERENCE 6: 135:357075

REFERENCE 7: 135:356337

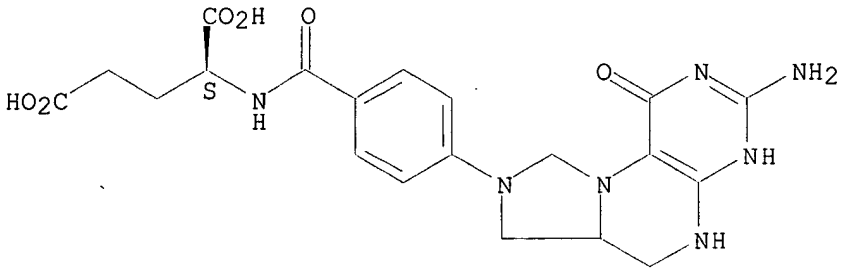
REFERENCE 8: 135:148597

REFERENCE 9: 134:127680

REFERENCE 10: 133:219369

L85 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **3432-99-3** REGISTRY
CN **L-Glutamic acid, N-[4-(3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Glutamic acid, N-[p-(3-amino-5,6,6a,7-tetrahydro-1-hydroxyimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]-, L- (8CI)**
CN **Imidazo[1,5-f]pteridine, L-glutamic acid deriv.**
OTHER NAMES:
CN (+)-5,10-Methylene-5,6,7,8-tetrahydrofolic acid
CN 5,10-Methylene-5,6,7,8-tetrahydrofolic acid
CN 5,10-Methylenetetrahydrofolic acid
CN Folic acid, tetrahydro-N5,N10-methylene-
CN N5,N10-Methylene-5,6,7,8-tetrahydrofolic acid
CN N5,N10-Methylenetetrahydrofolic acid
CN **N5,N10-Methylenetetrahydropteroylglutamic acid**
FS STEREOSEARCH
DR 14948-92-6, 23284-08-4, 39939-22-5, 42578-82-5
MF **C20 H23 N7 O6**
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

438 REFERENCES IN FILE CA (1967 TO DATE)
51 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
438 REFERENCES IN FILE CAPLUS (1967 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114515

REFERENCE 2: 137:29715

REFERENCE 3: 136:345818

REFERENCE 4: 136:163249

REFERENCE 5: 136:107523

REFERENCE 6: 136:11204

REFERENCE 7: 136:4848

REFERENCE 8: 135:357075

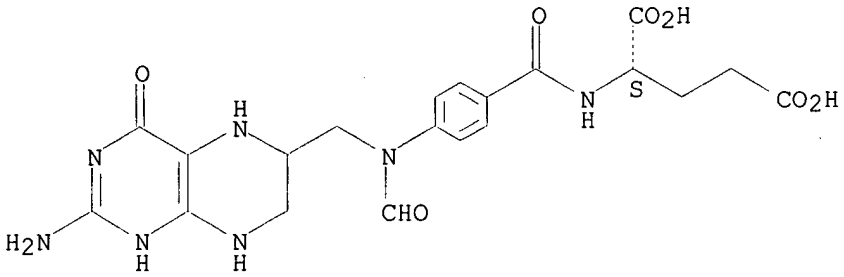
REFERENCE 9: 135:355679

REFERENCE 10: 135:315433

L85 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **2800-34-2** REGISTRY
CN **L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]formylamino]benzoyl]- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glutamic acid, N-[p-[N-[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]formamido]benzoyl]- (7CI)
CN Glutamic acid, N-[p-[N-[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]formamido]benzoyl]-, L- (8CI)
OTHER NAMES:
CN 10-Formyl-5,6,7,8-tetrahydrofolic acid
CN 10-Formyltetrahydrofolate
CN 10-Formyltetrahydrofolic acid
CN 10-Formyltetrahydropteroylglutamic acid
CN N10-Formyl-5,6,7,8-tetrahydrofolic acid
CN N10-Formyltetrahydrofolate
CN N10-Formyltetrahydrofolic acid
CN N10-Formyltetrahydropteroylglutamate
FS STEREOSEARCH

DR 18656-95-6
MF **C20 H23 N7 O7**
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, DDFU, DRUGU, EMBASE, MEDLINE, NIOSHTIC, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

278 REFERENCES IN FILE CA (1967 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
278 REFERENCES IN FILE CAPLUS (1967 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114515

REFERENCE 2: 136:397744

REFERENCE 3: 136:345818

REFERENCE 4: 136:306536

REFERENCE 5: 136:107523

REFERENCE 6: 136:83063

REFERENCE 7: 136:11204

REFERENCE 8: 136:4848

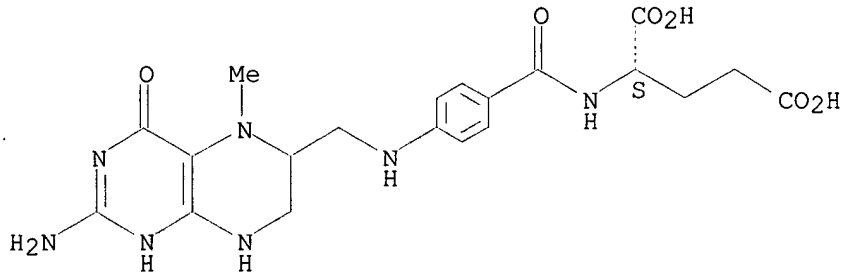
REFERENCE 9: 135:357075

REFERENCE 10: 135:355679

L85 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **134-35-0** REGISTRY
CN **L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI)** (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Glutamic acid, N-[p-[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridinyl)methyl]amino]benzoyl]-, L- (8CI)**
CN **Glutamic acid, N-[p-[[(2-amino-5,6,7,8-tetrahydro-4-hydroxy-5-methyl-6-pteridinyl)methyl]amino]benzoyl]- (6CI)**
OTHER NAMES:
CN **5-Methyl-5,6,7,8-tetrahydrofolic acid**

CN **5-Methyl-5,6,7,8-tetrahydropteroyl-L-glutamic acid**
CN **5-Methyltetrahydrofolic acid**
CN **5-Methyltetrahydropteroyl monoglutamate**
CN **5-Methyltetrahydropteroylglutamic acid**
CN N-Methyltetrahydrofolate
CN N-Methyltetrahydrofolic acid
CN N5-Methyltetrahydrofolate
CN N5-Methyltetrahydrofolic acid
CN N5-Methyltetrahydropteroylglutamate
CN Prefolic A
FS STEREOSEARCH
DR 3922-58-5, 76937-22-9
MF **C20 H25 N7 O6**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CIN, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NIOSHTIC, PROMT, TOXCENTER, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1016 REFERENCES IN FILE CA (1967 TO DATE)
21 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1018 REFERENCES IN FILE CAPLUS (1967 TO DATE)
16 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114515

REFERENCE 2: 137:74540

REFERENCE 3: 137:57568

REFERENCE 4: 137:41508

REFERENCE 5: 136:345818

REFERENCE 6: 136:278642

REFERENCE 7: 136:262429

REFERENCE 8: 136:216022

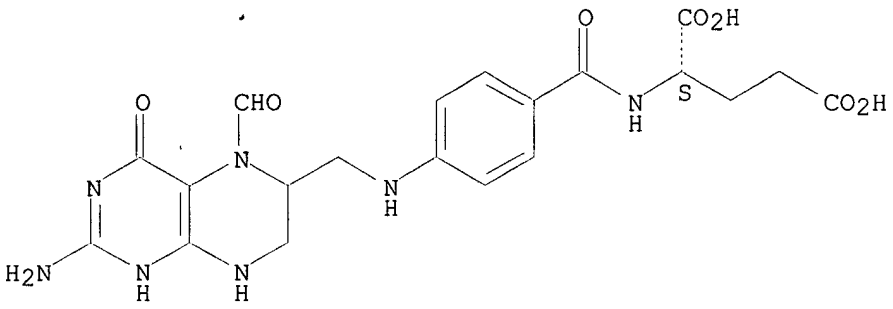
REFERENCE 9: 136:216020

REFERENCE 10: 136:164421

L85 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **58-05-9** REGISTRY

CN L-Glutamic acid, N-[4-[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glutamic acid, N-[p-[[(2-amino-5-formyl-5,6,7,8-tetrahydro-4-hydroxy-6-pteridinyl)methyl]amino]benzoyl]-, L- (8CI)
OTHER NAMES:
CN 10-Formyl-7,8-dihydrofolic acid
CN 5-Formyl-5,6,7,8-tetrahydrofolic acid
CN 5-Formyltetrahydrofolic acid
CN 5-Formyltetrahydropteroylglutamic acid
CN Folinic acid
CN Folinic acid-SF
CN l-Leucovorin
CN Leucal
CN Leucoverin
CN Leucovorin
CN Levoleucovorin
CN N5-Formyl-5,6,7,8-tetrahydrofolic acid
CN N5-Formyltetrahydrofolic acid
CN Welcovorin
FS STEREOSEARCH
DR 641-41-8, 121521-95-7, 17435-36-8, 3102-53-2, 33299-78-4, 34786-59-9, 40244-99-3
MF C20 H23 N7 O7
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC*, HSDB*, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHARMASEARCH, PROMT, TOXCENTER, USAN, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1741 REFERENCES IN FILE CA (1967 TO DATE)
38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1743 REFERENCES IN FILE CAPLUS (1967 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114515

REFERENCE 2: 137:103549

REFERENCE 3: 137:103542

REFERENCE 4: 137:98838

REFERENCE 5: 137:90156

REFERENCE 6: 137:88442

REFERENCE 7: 137:88084

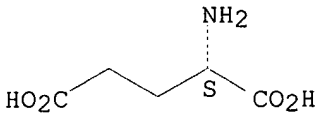
REFERENCE 8: 137:88040

REFERENCE 9: 137:88039

REFERENCE 10: 137:87943

L85 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2002 ACS
RN **56-86-0** REGISTRY
CN L-Glutamic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glutamic acid, L- (7CI, 8CI)
OTHER NAMES:
CN (2S)-2-Aminopentanedioic acid
CN (S)-(+)-Glutamic acid
CN (S)-2-Aminopentanedioic acid
CN (S)-Glutamic acid
CN .alpha.-Aminoglutaric acid
CN .alpha.-Glutamic acid
CN 1-Aminopropane-1,3-dicarboxylic acid
CN 2-Aminoglutaric acid
CN 2-Aminopentanedioic acid
CN 317: PN: WO0214478 SEQID: 316 claimed sequence
CN Aciglut
CN Glusate
CN Glutacid
CN **Glutamic acid**
CN Glutamicol
CN Glutamidex
CN Glutaminic acid
CN Glutaminol
CN Glutaton
CN L-(+)-Glutamic acid
CN L-.alpha.-Aminoglutaric acid
CN L-Glutaminic acid
CN l-Glutaminic acid
CN Pentanedioic acid, 2-amino-, (S)-
FS STEREOSEARCH
DR 6899-05-4, 10549-13-0, 138-16-9
MF C5 H9 N O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

48594 REFERENCES IN FILE CA (1967 TO DATE)
1618 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
48646 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 137:114612

REFERENCE 2: 137:114508

REFERENCE 3: 137:114496

REFERENCE 4: 137:114250

REFERENCE 5: 137:114249

REFERENCE 6: 137:114239

REFERENCE 7: 137:114206

REFERENCE 8: 137:114200

REFERENCE 9: 137:113929

REFERENCE 10: 137:113568

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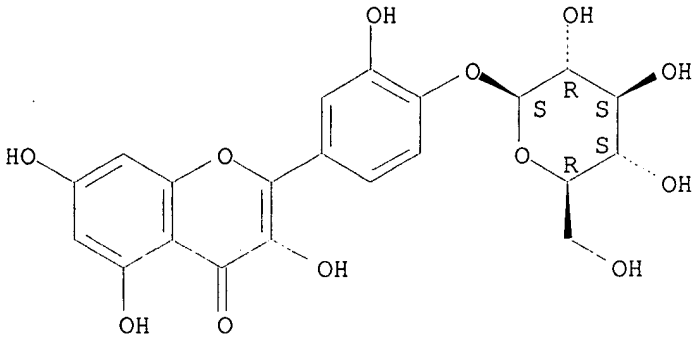
L84 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **20229-56-5** REGISTRY
CN 4H-1-Benzopyran-4-one, 2-[4-(.beta.-D-glucopyranosyloxy)-3-hydroxyphenyl]-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Spireoside (6CI, 7CI, 8CI)
OTHER NAMES:
CN Quercetin 4'-.beta.-D-glucopyranoside
CN Quercetin 4'-glucoside
CN Quercetin 4'-O-.beta.-D-glucopyranoside
CN Quercetin 4'-O-.beta.-glucopyranoside
CN Quercetin 4'-O-glucoside
CN Spiraein
CN Spiraein (Acacia)
CN **Spiraeosid**
CN Spiraeoside
FS STEREOSEARCH
DR 27459-69-4
MF C21 H20 O12
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, RTECS*, TOXCENTER
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

128 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
129 REFERENCES IN FILE CAPLUS (1967 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:68154

REFERENCE 2: 137:27775

REFERENCE 3: 136:385095

REFERENCE 4: 136:380112

REFERENCE 5: 136:308933

REFERENCE 6: 136:276441

REFERENCE 7: 136:221722

REFERENCE 8: 136:183123

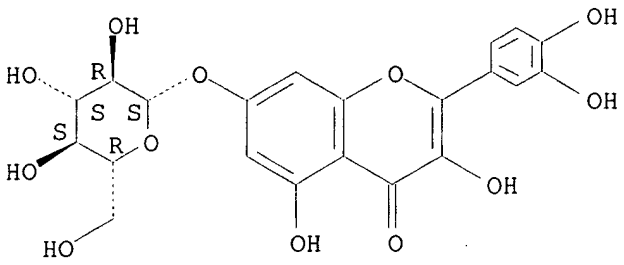
REFERENCE 9: 136:144998

REFERENCE 10: 136:95573

L84 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **491-50-9** REGISTRY
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-7-(.beta.-D-glucopyranosyloxy)-3,5-dihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Quercimeritrin (6CI, 7CI, 8CI)**
OTHER NAMES:
CN C.I. 75710
CN Quercetin 7-.beta.-D-glucopyranoside
CN Quercetin 7-O-.beta.-D-glucopyranoside
CN Quercetin 7-O-.beta.-D-glucoside
CN Quercimeritroside
FS STEREOSEARCH
DR 133-97-1, 1331-97-1, 30113-30-5
MF C21 H20 O12
CI COM

LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK*, NAPRALERT, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

282 REFERENCES IN FILE CA (1967 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
282 REFERENCES IN FILE CAPLUS (1967 TO DATE)
24 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:68154

REFERENCE 2: 137:44207

REFERENCE 3: 137:27775

REFERENCE 4: 136:276441

REFERENCE 5: 136:244428

REFERENCE 6: 136:221722

REFERENCE 7: 136:11204

REFERENCE 8: 136:2955

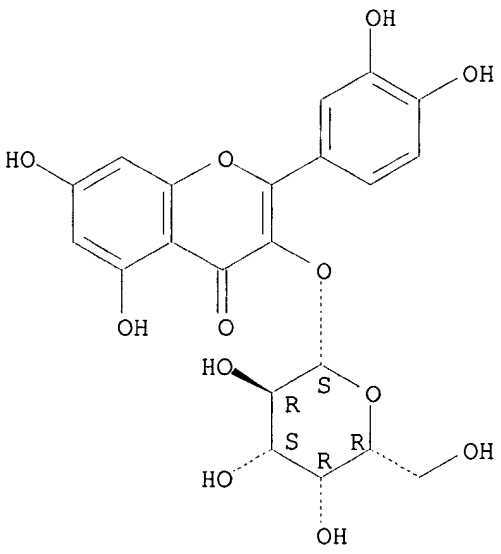
REFERENCE 9: 135:315866

REFERENCE 10: 135:195716

L84 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **482-36-0** REGISTRY
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-galactopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN **Hyperin (7CI, 8CI)**
OTHER NAMES:
CN 3,3',4',5,7-Pentahydroxyflavone 3-O-.beta.-D-galactopyranoside
CN 3-O-.beta.-D-Galactopyranosyl quercetin
CN 3-O-.beta.-D-galactopyranosylquercetin
CN Hyperosid
CN Hyperoside
CN Quercetin 3-.beta.-D-galactoside
CN Quercetin 3-.beta.-galactoside
CN Quercetin 3-galactoside

CN Quercetin 3-O-.beta.-D-galactopyranoside
CN Quercetin 3-O-.beta.-D-galactoside
CN Quercetin 3-O-.beta.-galactoside
FS STEREOSEARCH
DR 158560-10-2, 56552-81-9, 63003-36-1, 61277-37-0, 112457-37-1, 71184-39-9, 26857-03-4, 28986-85-8, 29224-70-2, 31710-72-2
MF C21 H20 O12
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NAPRALERT, PROMT, RTECS*, SPECINFO, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1309 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1314 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:88410

REFERENCE 2: 137:83745

REFERENCE 3: 137:83480

REFERENCE 4: 137:75393

REFERENCE 5: 137:68154

REFERENCE 6: 137:68136

REFERENCE 7: 137:60374

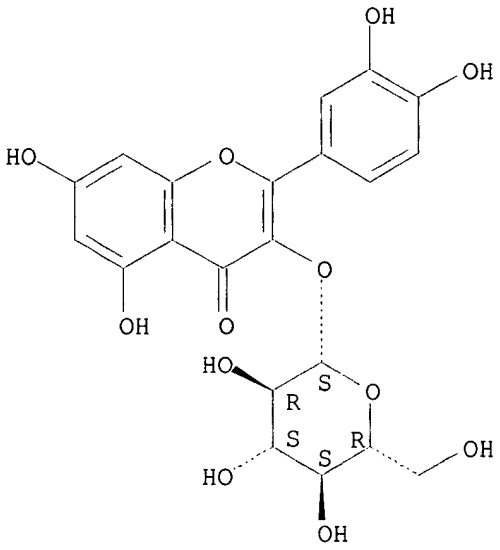
REFERENCE 8: 137:60293

REFERENCE 9: 137:60273

REFERENCE 10: 137:60260

L84 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **482-35-9** REGISTRY
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-glucopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Hirsutrin (8CI)
OTHER NAMES:
CN 3',4',5,7-Tetrahydroxyflavone-3-.beta.-D-glucopyranoside
CN 3-Glucosylquercetin
CN 3-O-.beta.-D-Glucopyranosylquercetin
CN Contigoside B
CN Glucosyl-3-quercetin
CN **Isoquercetin**
CN Q 5
CN Quercetin 3-.beta.-D-glucopyranoside
CN Quercetin 3-.beta.-D-glucoside
CN Quercetin 3-.beta.-glucoside
CN Quercetin 3-D-glucoside
CN Quercetin 3-glucoside
CN Quercetin 3-mono-D-glucoside
CN Quercetin 3-monoglucoside
CN Quercetin 3-O-.beta.-D-glucopyranoside
CN Quercetin 3-O-.beta.-D-glucoside
CN Quercetin 3-O-.beta.-glucoside
CN Quercetin 3-O-glucopyranoside
CN Quercetin 3-O-glucoside
CN Quercetin 3.beta.-glucoside
CN Quercetin 3.beta.-O-glucoside
CN Quercetin glucoside
CN Quercetol 3-glucoside
CN Quercetol 3-monoglucoside
FS STEREOSEARCH
DR 133946-90-4, 61277-38-1, 27215-07-2, 28454-82-2, 107438-55-1, 355806-24-5
MF C21 H20 O12
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, DDFU, DRUGU, EMBASE, IPA, NAPRALERT, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1222 REFERENCES IN FILE CA (1967 TO DATE)
19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1225 REFERENCES IN FILE CAPLUS (1967 TO DATE)
18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:106502

REFERENCE 2: 137:83483

REFERENCE 3: 137:78170

REFERENCE 4: 137:75393

REFERENCE 5: 137:60710

REFERENCE 6: 137:60374

REFERENCE 7: 137:57502

REFERENCE 8: 137:44253

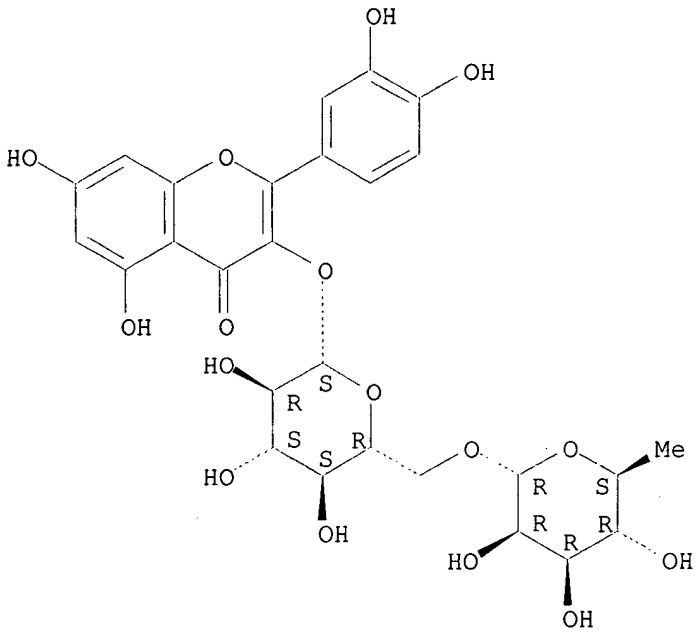
REFERENCE 9: 137:44232

REFERENCE 10: 137:44228

L84 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **153-18-4** REGISTRY
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Flavone, 3,3',4',5,5',7-hexahydroxy-, (6-O-.alpha.-L-rhamnosyl-.beta.-D-glucoside) (7CI)
CN Ilixanthin (6CI)
CN **Rutin (8CI)**
OTHER NAMES:
CN 3,3',4',5,7-Pentahydroxyflavone 3-O-rutinoside
CN 3,3',4',5,7-Pentahydroxyflavone 3-rutinoside

CN 3-Rutinosylquercetin
CN 5,7,3',4'-Tetrahydroxyflavonol-3-O-rutinoside
CN Birutan
CN C.I. 75730
CN Eldrin
CN Globulariacitrin
CN Globularicitrin
CN Melin
CN Myrticalorin
CN Myrticolorin
CN Myticolorin
CN Osyritin
CN Osyritrin
CN Oxyritin
CN Paliuroside
CN Phytomelin
CN Quercetin 3-.beta.-rutinoside
CN Quercetin 3-O-.beta.-D-rutinoside
CN Quercetin 3-O-.beta.-rutinoside
CN Quercetin 3-O-rutinoside
CN Quercetin 3-rhamnoglucoside
CN Quercetin 3-rutinoside
CN Rutabion
CN Rutinic acid
CN Rutosid
CN Rutoside
CN Sophorin
CN Tanrutin
CN Violaquercitrin
FS STEREOSEARCH
DR 164535-43-7, 1416-01-9, 158560-09-9, 56764-99-9, 18449-50-8, 146525-66-8, 48197-72-4, 115888-40-9
MF C27 H30 O16
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4666 REFERENCES IN FILE CA (1967 TO DATE)
194 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4682 REFERENCES IN FILE CAPLUS (1967 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:108484

REFERENCE 2: 137:108470

REFERENCE 3: 137:106523

REFERENCE 4: 137:106500

REFERENCE 5: 137:103062

REFERENCE 6: 137:99014

REFERENCE 7: 137:91079

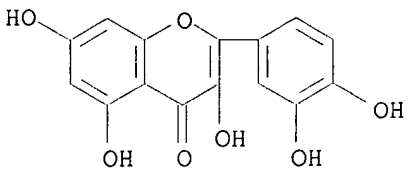
REFERENCE 8: 137:88410

REFERENCE 9: 137:83745

REFERENCE 10: 137:83480

L84 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2002 ACS
RN **117-39-5** REGISTRY
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Flavone, 3,3',4',5,7-pentahydroxy- (7CI, 8CI)
CN Flavone, 3,4',5,5',7-pentahydroxy- (6CI)
OTHER NAMES:
CN 3,3',4',5,7-Pentahydroxyflavone
CN 3,5,7,3',4'-Pentahydroxyflavone

CN C.I. 75670
CN C.I. Natural Yellow 10
CN Cyanidelonon 1522
CN Meletin
CN **Quercetin**
CN Quercetine
CN Quercetol
CN Quercitin
CN Quertin
CN Quertine
CN Sophoretin
CN Xanthaurine
FS 3D CONCORD
DR 73123-10-1, 74893-81-5
MF C15 H10 O7
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

7384 REFERENCES IN FILE CA (1967 TO DATE)
567 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
7402 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:114641

REFERENCE 2: 137:114336

REFERENCE 3: 137:114233

REFERENCE 4: 137:108659

REFERENCE 5: 137:108484

REFERENCE 6: 137:106502

REFERENCE 7: 137:106500

REFERENCE 8: 137:106075

REFERENCE 9: 137:105822

REFERENCE 10: 137:105653

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     (FILE 'HOME' ENTERED AT 07:15:39 ON 19 AUG 2002)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 07:15:52 ON 19 AUG 2002
               E BETAINE/CN
L1             1 S E3
L2             5 S C5H12NO2/MF AND TRIMETHYL
L3             1 S L2 NOT (D/ELS OR LABELED)
L4             2 S L1,L3
L5             1 S DIMETHYLGLYCINE/CN
L6             1 S SARCOSINE/CN
L7             3 S 56-45-1 OR 312-84-5 OR 302-84-1
L8             7 S L4-L7
               SEL RN
L9           679 S E1-E7/CRN
L10            7 S (HYPERIN OR ISOQUERCETIN OR QUERCETIN OR ISOQUERCITRIN OR QUE
               SEL RN
L11          283 S E8-E14/CRN

     FILE 'HCAPLUS' ENTERED AT 07:23:20 ON 19 AUG 2002
L12        31449 S L8
L13         1619 S L9
L14       102306 S BETAINE OR DIMETHYLGLYCINE OR (DIMETHYL OR DIME OR DI METHYL)
L15       107742 S L12-L14
L16        11178 S L10
L17          625 S L11
L18        14695 S HYPERIN OR ISOQUERCETIN OR QUERCETIN OR ISOQUERCITRIN OR QUER
L19        16007 S L16-L18
L20          637 S BIOFLAVONOID
               E BIOFLAVONOID/CT
               E E4+ALL
L21          139 S E2
               E FLAVONOID/CT
               E E6+ALL
L22        22507 S E4,E5,E21-E28,E36,E37,E46,E47,E48,E51,E52,E54
L23        27425 S L19-L22
               E AGLYCON/CT
               E E4_ALL
               E AGLYCON/CT
               E E4+ALL
L24          902 S E2
L25        29594 S E22
L26        53908 S L23,L24,L25
L27          640 S L15 AND L26
               E BUCHHOLZ H/AU
L28          107 S E3-E5,E18,E19
               E BUECHHOLZ H/AU
               E BEUCHHOLZ H/AU
               E MEDUSKI J/AU
L29           30 S E3-E7
L30          129 S L28,L29
L31            2 S L30 AND L27
L32        28332 S MERCK/PA,CS
L33            3 S L32 AND L27
L34            3 S L31,L33
               SEL DN AN 2
L35            1 S L34 AND E1-E3

     FILE 'REGISTRY' ENTERED AT 07:31:32 ON 19 AUG 2002
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L36           6 S 58-05-9 OR 134-35-0 OR 2800-34-2 OR 3432-99-3 OR 10360-12-0 O
                E DIHYDROFOLIC ACID/CN
L37           1 S E3
                E TETRAHYDROFOLIC ACID/CN
L38           1 S E3
L39           8 S L36-L38
                E C20H25N7O6/MF
L40          31 S E3 AND 46.150.18/RID AND NCNC3-NC2NC2/ES
L41          28 S L40 AND GLUTAMIC ACID
L42          21 S L41 AND HEXAHYDRO
L43          13 S L42 AND 5 METHYL
L44           5 S L43 NOT (LABELED OR 11C# OR 13C# OR 14C# OR C11# OR C13# OR C
L45          21 S C20H23N7O6/MF AND 46.150.18/RID AND NCNC2-NCNC3-NC2NC2/ES
L46          20 S L45 AND GLUTAMIC ACID AND HEXAHYDRO AND 3 AMINO
L47           5 S L46 NOT (LABELED OR 11C# OR 13C# OR 14C# OR C11# OR C13# OR C
L48           4 S L47 NOT 15N#
L49           4 S C20H23N7O7/MF AND 46.150.18/RID AND NCNC3-NC2NC2/ES AND HEXAH
L50           3 S L49 NOT 13C#
L51           6 S C20H22N7O6/MF AND 46.150.18/RID AND NCNC2-NCNC3-NC2NC2/ES AND
L52           4 S L51 NOT (T OR D)/ELS
L53          13 S C19H23N7O6/MF AND GLUTAMIC ACID AND HEXAHYDRO
L54           5 S L53 NOT (LABELED OR 11C# OR 13C# OR 14C# OR C11# OR C13# OR C
L55           4 S L54 NOT 15N#
L56          15 S C19H21N7O6/MF AND 46.150.18/RID AND GLUTAMIC ACID AND TETRAHY
L57           8 S L56 NOT (LABELED OR 11C# OR 13C# OR 14C# OR C11# OR C13# OR C
L58           7 S L57 NOT 188497-71-4
L59           4 S L58 NOT (25512-82-7 OR 83961-83-5 OR 74072-24-5)
L60          26 S L39,L44,L48,L50,L52,L55,L59
L61           2 S GLUTAMIC ACID/CN
L62           1 S D-GLUTAMIC ACID/CN
L63          29 S L60-L62
                SEL RN
L64        1304 S E1-E29/CRN

     FILE 'HCAPLUS' ENTERED AT 08:43:20 ON 19 AUG 2002
L65       53232 S L63
L66        7701 S L64
L67       76589 S (DIHYDROFOLIC OR TETRAHYDROFOLIC OR METHYLTETRAHYDROFOLIC OR
L68         136 S L27 AND L65-L67
L69       91361 S DIHYDROFOLATE OR TETRAHYDROFOLATE OR METHYLTETRAHYDROFOLATE O
L70          20 S L27 AND L69
L71           2 S L68,L70 AND L34
L72           1 S L71 NOT PESTICIDE
L73          97 S L68,L70 AND (PD<=19981030 OR PRD<=19981030 OR AD<=19981030)
L74          80 S L73 AND L12,L13
L75          20 S L74 AND L16,L17
L76          20 S L75 AND L65,L66
                SEL DN AN 2 4 6 12 13 15
L77           6 S L76 AND E30-E47
L78           6 S L72,L77
L79          77 S L73 NOT L76
L80          63 S L79 AND (COMPOSITION OR COMBIN? OR MIX? OR SYNERG? OR COADMIN
L81          14 S L79 NOT L80
                SEL HIT RN L78

     FILE 'REGISTRY' ENTERED AT 09:09:51 ON 19 AUG 2002
L82          18 S E48-E65
L83           5 S L82 AND L8,L9
L84           6 S L82 AND L10,L11
L85           7 S L82 AND L63,L64

     FILE 'REGISTRY' ENTERED AT 09:10:25 ON 19 AUG 2002
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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 09:10:50 ON 19 AUG 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 19 Aug 2002  VOL 137 ISS 8
FILE LAST UPDATED: 18 Aug 2002  (20020818/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> d all hitstr tot l78

L78  ANSWER 1 OF 6  HCAPLUS  COPYRIGHT 2002 ACS
AN   2000:314527  HCAPLUS
DN   132:326078
TI   Compositions for the treatment and prevention of cardiovascular diseases
IN   Buchholz, Herwig; Meduski, Jerzy D.
PA   Merck Patent G.m.b.H., Germany
SO   PCT Int. Appl., 18 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K031-00
CC   63-6 (Pharmaceuticals)
     Section cross-reference(s): 1, 17
FAN.CNT 1
     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
PI   WO 2000025764     A2    20000511      WO 1999-EP7689   19991013 <--
     WO 2000025764     A3    20000713
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9964709        A1    20000522      AU 1999-64709    19991013 <--
     BR 9914815        A     20010703      BR 1999-14815    19991013 <--
     EP 1124548        A2    20010822      EP 1999-952559   19991013 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI US 1998-106205P   P     19981030  <--
```

WO 1999-EP7689 W 19991013

AB Compns. comprising one or more active ingredients and, optionally, one or more nutritional substances, solid, liq. and/or semiliquid excipients or auxiliaries, wherein the active ingredients consist of a) a consisting of one or more compds. selected from Me and methylene donors, b) a consisting of one or more Me transporters, and c) a consisting of one or more **bioflavonoids** are well-suited for the treatment and prevention of transmethylation disorders, preferably cardiovascular diseases such as atherogenic and thrombogenic diseases. A compn. was prepd. contg. **betaine** 600, Ca L-5-**methyltetrahydrofolate** 0.5, and **isoquercetin** 500 mg.

ST cardiovascular disease pharmaceutical; methyl transporter cardiovascular disease pharmaceutical; **bioflavonoid** cardiovascular disease pharmaceutical

IT **Flavonoids**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**bioflavonoids**; compns. for treatment and prevention of cardiovascular diseases)

IT Cardiovascular agents
Nutrients
(compns. for treatment and prevention of cardiovascular diseases)

IT Drug delivery systems
(tablets; compns. for treatment and prevention of cardiovascular diseases)

IT Methylation
(transmethylation, biol., disorders; compns. for treatment and prevention of cardiovascular diseases)

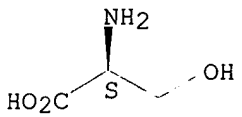
IT **56-45-1**, L-**Serine**, biological studies **58-05-9** **107-43-7**, **Betaine 107-97-1**, **Sarcosine** **117-39-5**, **Quercetin 134-35-0**, 5-**Methyltetrahydrofolic acid 153-18-4**, **Rutin 482-35-9**, **Isoquercetin 482-36-0** , **Hyperin 491-50-9**, **Quercimeritrin** **1118-68-9**, **Dimethylglycine 2800-34-2**, 10-**Formyltetrahydrofolate 3432-99-3 10360-12-0** **20229-56-5**, **Spiraeosid 139418-88-5**, L-**Glutamic acid**, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, calcium salt
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. for treatment and prevention of cardiovascular diseases)

IT **56-45-1**, L-**Serine**, biological studies **58-05-9** **107-43-7**, **Betaine 107-97-1**, **Sarcosine** **117-39-5**, **Quercetin 134-35-0**, 5-**Methyltetrahydrofolic acid 153-18-4**, **Rutin 482-35-9**, **Isoquercetin 482-36-0*****, ***Hyperin 491-50-9**, **Quercimeritrin** **1118-68-9**, **Dimethylglycine 2800-34-2**, 10-**Formyltetrahydrofolate 3432-99-3 10360-12-0** **20229-56-5**, **Spiraeosid 139418-88-5**, L-**Glutamic acid**, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, calcium salt
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. for treatment and prevention of cardiovascular diseases)

RN 56-45-1 HCAPLUS

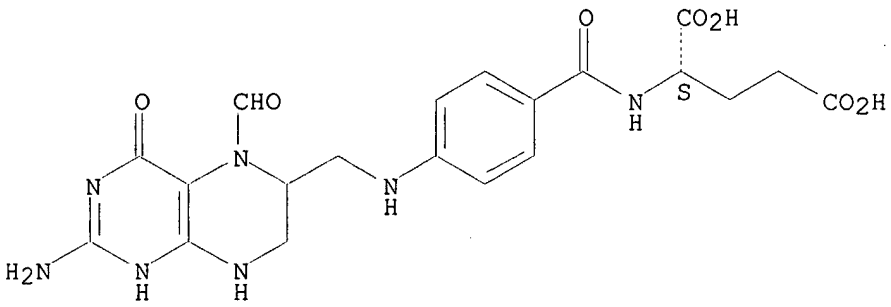
CN L-Serine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

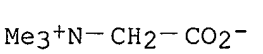


RN 58-05-9 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2-amino-5-formyl-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

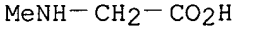
Absolute stereochemistry.



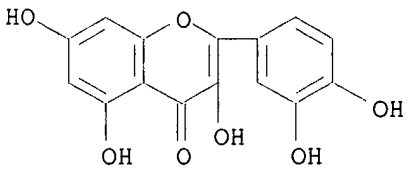
RN 107-43-7 HCAPLUS
CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, inner salt (9CI) (CA INDEX NAME)



RN 107-97-1 HCAPLUS
CN Glycine, N-methyl- (9CI) (CA INDEX NAME)

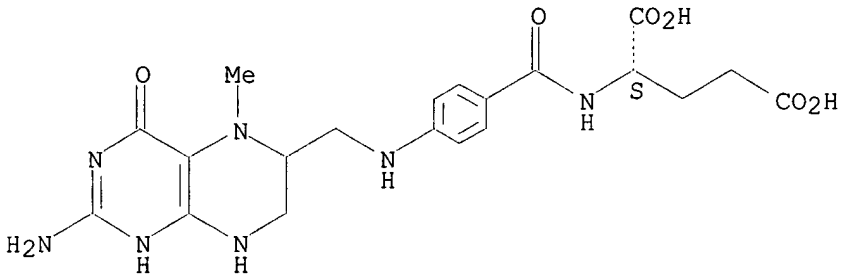


RN 117-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)



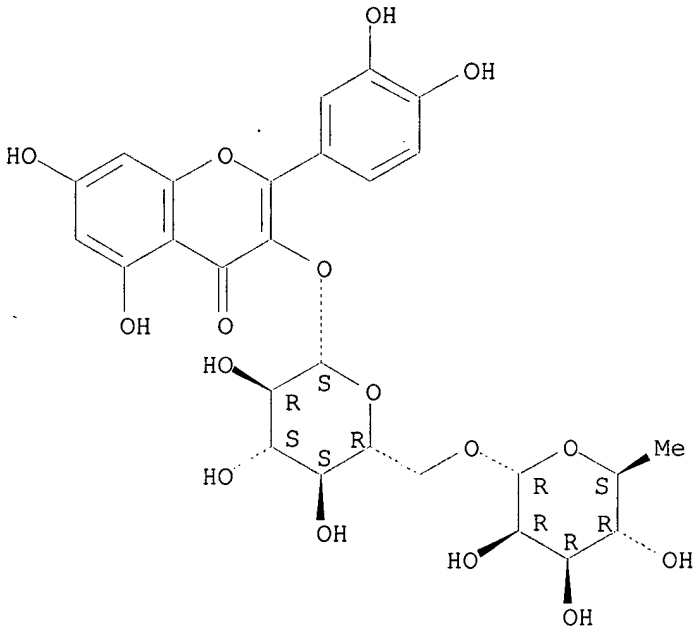
RN 134-35-0 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



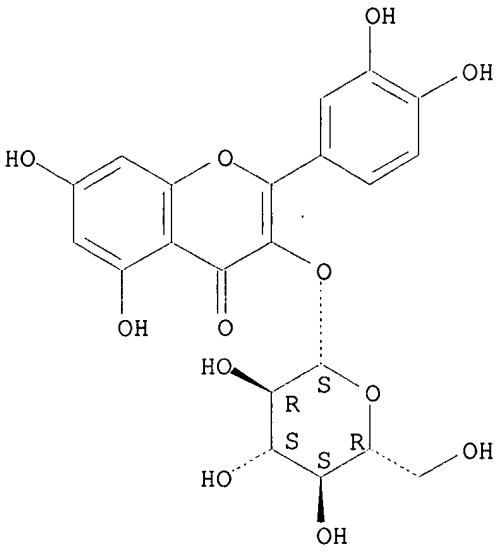
RN 153-18-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



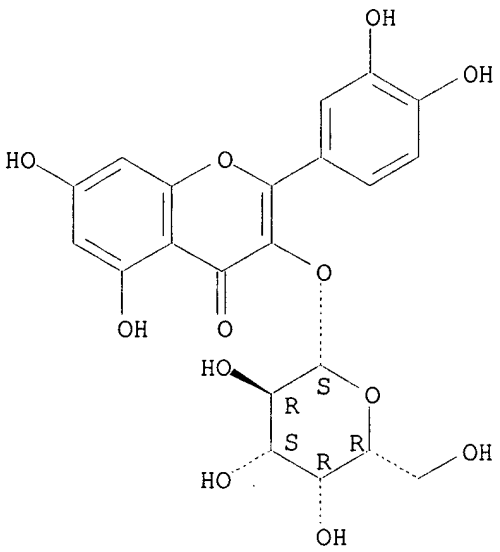
RN 482-35-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-glucopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



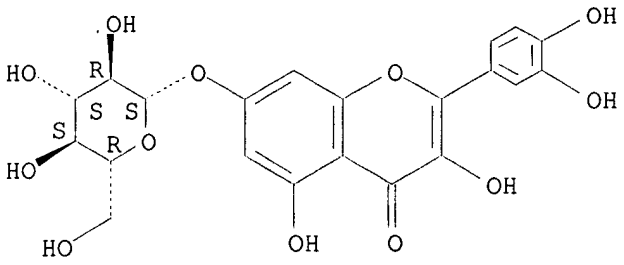
RN 482-36-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-galactopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

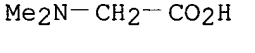


RN 491-50-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-7-(.beta.-D-glucopyranosyloxy)-3,5-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

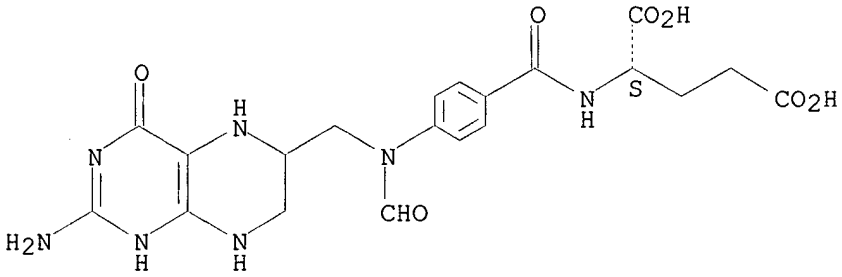


RN 1118-68-9 HCAPLUS
CN Glycine, N,N-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



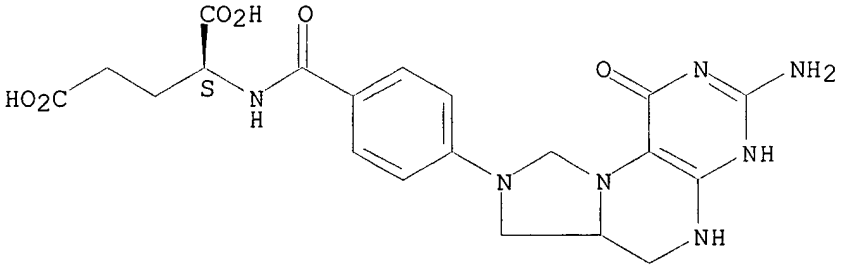
RN 2800-34-2 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-4-oxo-6-pteridinyl)methyl]formylamino]benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



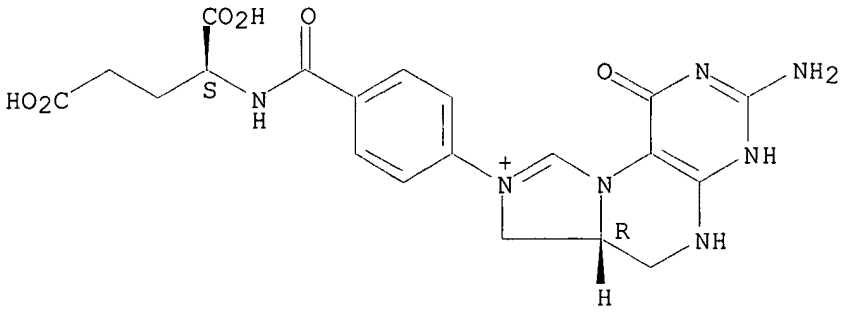
RN 3432-99-3 HCAPLUS
CN L-Glutamic acid, N-[4-(3-amino-1,2,5,6,6a,7-hexahydro-1-oxoimidazo[1,5-f]pteridin-8(9H)-yl)benzoyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



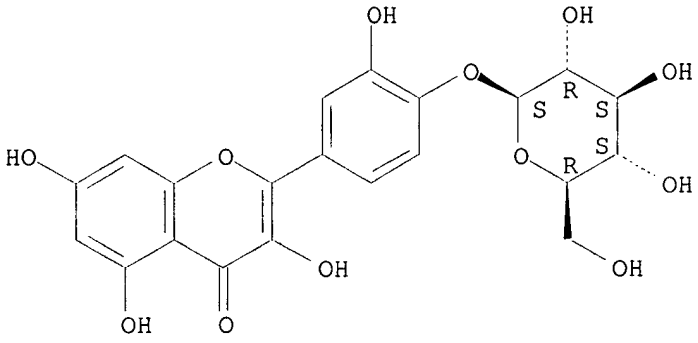
RN 10360-12-0 HCAPLUS
CN Imidazo[1,5-f]pteridinium, 3-amino-8-[4-[[[(1S)-1,3-dicarboxypropyl]amino]carbonyl]phenyl]-1,2,5,6,6a,7-hexahydro-1-oxo-, (6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



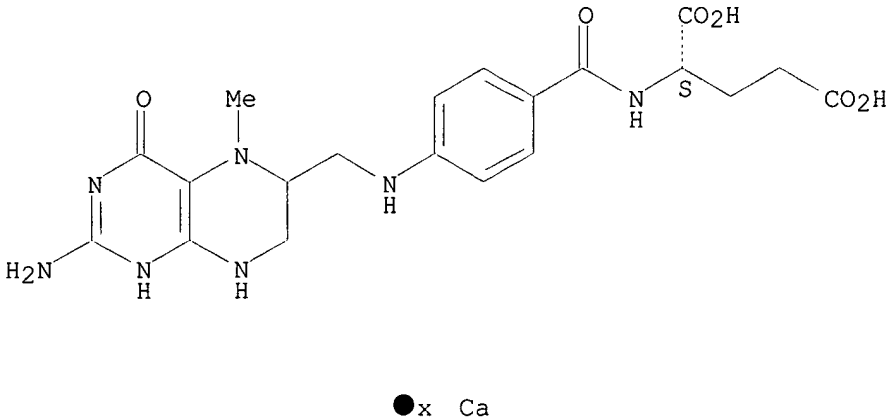
RN 20229-56-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(.beta.-D-glucopyranosyloxy)-3-hydroxyphenyl]-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 139418-88-5 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2-amino-1,4,5,6,7,8-hexahydro-5-methyl-4-oxo-6-pteridinyl)methyl]amino]benzoyl]-, calcium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●x Ca

L78 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN **1998:473951** HCAPLUS
DN **129:126908**
TI Composition for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid

IN De Paoli Ambrosi, Gianfranco
PA Italy
SO Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K007-48
ICS A61K031-00; A61K038-16; A61K031-70
CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 852946	A2	19980715	EP 1997-830609	19971117 <--
	EP 852946	A3	19980916		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6147054	A	20001114	US 1997-971436	19971117 <--
	CA 2219849	AA	19980529	CA 1997-2219849	19971121 <--
PRAI	IT 1996-BS94	A	19961129 <--		

AB A compn. is disclosed for cosmetic, pharmaceutical or dietetic use and including as the active ingredient, at least one of the substances which include acetylglucosamine and glucuronic acid in combination with the active ingredients which belong to the chem. class of the carboxylic acids, .alpha.-hydroxy acids, vitamins, amino acids, and **bioflavonoids**, and formulated with particular synergists, additives, and excipients for external use or for internal use.

ST cosmetic formulation aminosugar polyhydroxy acid drug

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(aldoses; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(amino sugars; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Bilberry
(anthocyanins of; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT **Flavonoids**
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**bioflavonoids**; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Drug delivery systems
(capsules; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Aloe barbadensis
Calendula officinalis
Centella asiatica
Cosmetics
Drugs
Echinacea angustifolia
Equisetum arvense
Grape
Hamamelis virginiana
Horse chestnut (Aesculus hippocastanum)
Lemon (Citrus limon)

Licorice (Glycyrrhiza glabra)
Rue (Ruta graveolens)
Silybum marianum
Terminalia sericea
Vaccinium myrtillus
(compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Amino acids, biological studies
Anthocyanins
Flavonoids
Isoflavonoids
Saponins
Terpenes, biological studies
Triterpenes
Vitamins
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(dicarboxylic; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Cosmetics
(emulsions, water-in-oil; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(hydroxy, polycarboxylic; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(hydroxy; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Drug delivery systems
(injections; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ketoses; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Orange
(sour; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT Drug delivery systems
(tablets; compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

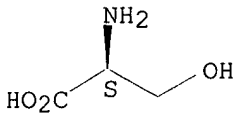
IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid, biological studies 52-90-4, Cysteine, biological studies 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies **56-45-1, Serine**, biological studies 56-84-8, L-Aspartic acid, biological studies 56-85-9, Glutamine, biological studies **56-86-0, Glutamic acid**, biological studies 56-87-1, L-Lysine, biological studies 58-85-5, Biotin

59-30-3, Folic acid, biological studies 59-43-8, Vitamin b1, biological studies 59-67-6, Nicotinic acid, biological studies 60-18-4, Tyrosine, biological studies 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 61-90-5, Leucine, biological studies 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine, biological studies 68-26-8, Retinol 69-72-7, Salicylic acid, biological studies 71-00-1, Histidine, biological studies 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 73-22-3, Tryptophan, biological studies 73-32-5, Isoleucine, biological studies 74-79-3, L-Arginine, biological studies 77-92-9, biological studies 79-14-1, Glycolic acid, biological studies 79-83-4, Pantothenic acid 83-88-5, Vitamin b2, biological studies 87-69-4, biological studies 90-64-2 98-92-0, Nicotinamide 116-31-4, Retinal **117-39-5**, **Quercetin** 147-85-3, Proline, biological studies 150-13-0 **153-18-4D**, **Rutin**, derivs. 302-79-4, Retinoic acid 463-40-1, Linolenic acid 464-92-6, Asiatic acid 471-53-4, Glycyrrhetic acid 480-17-1, Leucocyanidin **482-35-9**, **Isoquercetin** 495-62-5, Bisabolene 506-32-1, Arachidonic acid 520-27-4, Diosmin 528-58-5, Cyanidin 1398-61-4, Chitin 6556-12-3, D-Glucuronic acid 6805-41-0, Escin 6915-15-7, Malic acid 7235-40-7, .beta.-Carotene 7512-17-6, Acetylglucosamine 8059-24-3, Vitamin b6 9004-61-9, Hyaluronic acid 9005-49-6, Heparin, biological studies 16830-15-2, Asiaticoside 18449-41-7, Madecassic acid 24967-94-0, Dermatan sulfate 29656-58-4, Hydroxybenzoic acid 32449-92-6, Glucuronolactone 34540-22-2, Madecassoside 35054-79-6, Hydroxybutyric acid 55306-03-1, Sericic acid 55306-04-2, Sericoside 65666-07-1, Silymarin 82854-37-3, Echinacoside 105815-90-5, Echinacin
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

IT **56-45-1**, **Serine**, biological studies **56-86-0**, **Glutamic acid**, biological studies **117-39-5**, **Quercetin** **153-18-4D**, **Rutin**, derivs. **482-35-9**, **Isoquercetin**
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(compn. for cosmetic, pharmaceutical or dietetic use based on an amino-sugar and/or a polyhydroxylic acid)

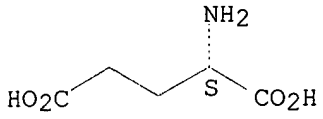
RN 56-45-1 HCAPLUS
CN L-Serine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

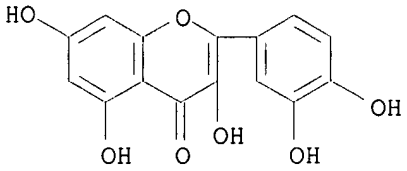


RN 56-86-0 HCAPLUS
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.

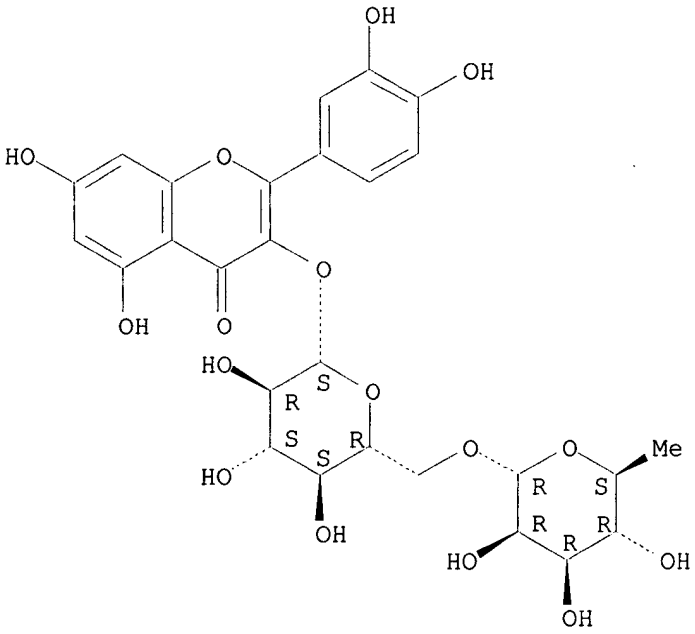


RN 117-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)



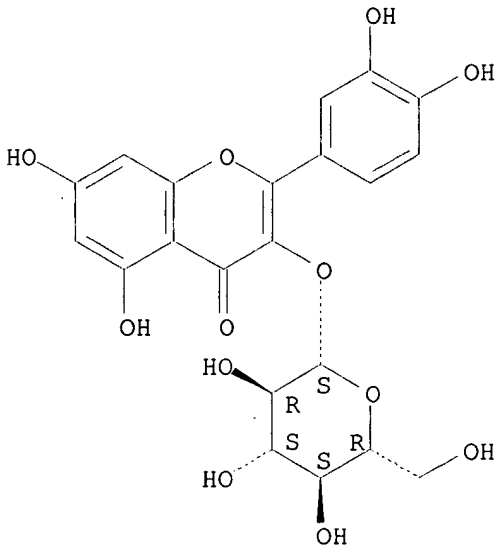
RN 153-18-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 482-35-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-glucopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L78 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN **1994:708376** HCAPLUS
DN **121:308376**
TI Treatment of arthritic conditions
IN Koppel, Richard M.; Verebey, Karl
PA USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K033-32
ICS A61K035-78; A61K033-26; A61K031-70
NCL 424639000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5358720	A	19941025	US 1993-139742	19931022 <--

AB A regimented therapeutic method for he alleviation of arthritic conditions by orally administering a selective combination of vitamins and minerals in scheduled dosage amts. The daily scheduled regimen involves the administration of about 25-100 mg of nicotinic acid three times per day, about 200-1000 mg of calcium ascorbate three times a day, and a single dosage form of a copper-free multivitamin with multiminerals to be taken once a day.

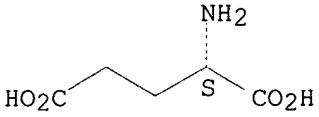
ST arthritis vitamin mineral
IT Minerals
Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of arthritis)
IT Inflammation inhibitors
(antiarthritics, vitamins and minerals in treatment of arthritis)
IT 50-81-7, Vitamin C, biological studies **56-86-0, Glutamic acid**, biological studies 58-85-5, Biotin 59-30-3, Folic acid, biological studies 59-43-8, Vitamin B1, biological studies 59-67-6, Nicotinic acid, biological studies 68-19-9, Vitamin B12 79-83-4, Pantothenic acid 83-88-5, Vitamin B2, biological studies 87-67-2, Choline bitartrate, biological studies 87-89-8, myo-Inositol 98-92-0, Niacinamide 150-13-0, PABA **153-18-4, Rutin**

520-26-3D, Hesperidin, complex **590-46-5, Betaine**
hydrochloride 1406-16-2, Vitamin D 1406-18-4, Vitamin E 5743-27-1, Calcium ascorbate 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-09-7, Potassium, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7553-56-2, Iodine, biological studies 7782-49-2, Selenium, biological studies 8059-24-3, Vitamin B6 11103-57-4, Vitamin A
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of arthritis)

IT **56-86-0, Glutamic acid**, biological studies
153-18-4, Rutin 590-46-5, Betaine
hydrochloride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of arthritis)

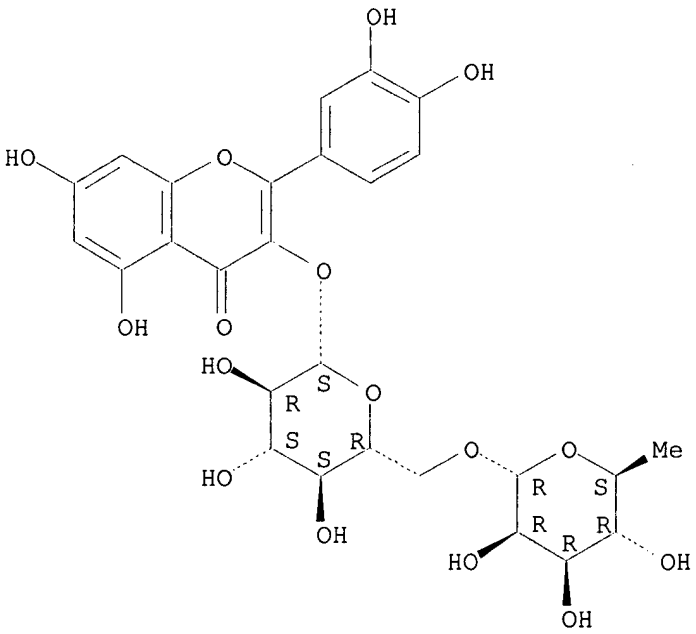
RN 56-86-0 HCAPLUS
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 153-18-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 590-46-5 HCAPLUS
CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

$Me_3^+N-CH_2-CO_2H$

● Cl^-

L78 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN **1989:472962** HCAPLUS
DN **111:72962**
TI Pharmaceuticals containing Eleutherococcus extracts for the inhibition of ethanol addiction
IN Mudzhiri, L. A.; Alkhazashvili, G. G.; Kalatozishvili, E. I.; Chekurishvili, G. O.; Brekhman, I. I.; Bulanov, A. E.; Polozhentseva, M. I.
PA Institute of Sea Biology, Vladivostok, USSR; Scientific-Research Institute of Horticulture, Viticulture, and Wine Making
SO Brit. UK Pat. Appl., 77 pp.
CODEN: BAXXDU
DT Patent
LA English
IC ICM A61K031-195
ICS A61K031-05; A61K031-70; A61K031-715; A61K035-78
CC 4-7 (Toxicology)
Section cross-reference(s): 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2198041	A1	19880608	GB 1987-6977	19870324 <--
GB 2198041	B2	19910605		
PRAI GB 1986-28228		19861126 <--		

AB Pharmaceuticals for the inhibition of the development of pathol. addiction to EtOH comprise a mixt. of flavonoids, leucoanthocyanins, sterols, amino acids, etc. which lowers the toxic effects of EtOH; when added to alc. beverages, the resulting compns. have good organoleptic properties. A compn. (473 kg) contg. leucoanthocyanins 219, catechins 153, flavonols 81, lignin 68, reducing sugars 216, pectin 16, free amino acids 27, org. acids 36, sterols 4.5, methyl sterols 1.35, dimethyl sterols 1.98, lignans 13.5, lignan glycosides 9, phenolic acids 13.5, phenolic aldehydes 4.5, and alkyl ferulates 4.5 mg/g was added to 4950 kg plum alc., 95 kg sugar, 1.8 kg citric acid, and 28 kg color tint and sufficient EtOH-H2O to give a beverage contg. 40 vol.% alc.; the beverage was heated for 5 h to 80.degree., cooled to 0-1.degree., filtered, and allowed to stand for 10 days at 20-22.degree.. Rats with a high tolerance toward EtOH were administered drinking water contg. 15% EtOH and the compn. described above (1 mL/50 mL). After 13 wk of administration, the rats were deprived of EtOH for 10 days. Beginning from the 8th wk a trend toward reduced EtOH consumption in the treated animals was seen when offered H2O or EtOH-contg. H2O; after deprivation, the EtOH consumption increased in the nontreated controls by 12%, whereas in the treated animals it did not; the treated animals also did not show withdrawal symptoms. This compn. was also administered to humans in the form of alc.-contg. beverages and the total redn. of consumption over a 10-mo period was 28.01%.
ST flavonoid leucoanthocyanin sterol alcoholism beverage
IT Amino acids, biological studies
Carbohydrates and Sugars, biological studies
Carboxylic acids, biological studies
Flavanols
Leucoanthocyanins
Lignans

RL: BIOL (Biological study)
(ethanol addiction inhibition with compn. contg.)

IT Lignans
RL: BIOL (Biological study)
(glycosides, ethanol addiction inhibition with compn. contg.)

IT Steroids, biological studies
RL: BIOL (Biological study)
(hydroxy, ethanol addiction inhibition with compn. contg.)

IT Steroids, biological studies
RL: BIOL (Biological study)
(hydroxy Me, ethanol addiction inhibition with compn. contg.)

IT **Glycosides**
RL: BIOL (Biological study)
(lignan, ethanol addiction inhibition with compn. contg.)

IT **Flavonoids**
RL: BIOL (Biological study)
(oxo hydroxy, ethanol addiction inhibition with compn. contg.)

IT Aldehydes, biological studies
Carboxylic acids, biological studies
RL: BIOL (Biological study)
(phenolic, ethanol addiction inhibition with compn. contg.)

IT Mental disorder
(psychosis, from alc., inhibition of, with pharmaceuticals contg. flavonoids and leucoanthocyanins and sterols)

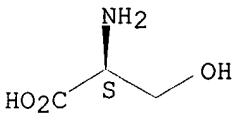
IT Carbohydrates and Sugars, biological studies
RL: BIOL (Biological study)
(reducing, ethanol addiction inhibition with compn. contg.)

IT 64-17-5, Ethanol, biological studies
RL: BIOL (Biological study)
(addiction to, inhibition of, with pharmaceuticals contg. flavonoids and leucoanthocyanins and sterols)

IT 50-81-7, Ascorbic acid, biological studies 50-99-7, D-Glucose, biological studies 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies **56-45-1, Serine,** biological studies 56-84-8, L-Aspartic acid, biological studies **56-86-0, L-Glutamic acid,** biological studies 56-87-1, Lysine, biological studies 56-89-3, Cystine, biological studies 57-48-7, D-Fructose, biological studies 57-50-1, biological studies 58-86-6, Xylose, biological studies 60-18-4, Tyrosine, biological studies 61-90-5, Leucine, biological studies 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine, biological studies 71-00-1, Histidine, biological studies 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 73-32-5, Isoleucine, biological studies 74-79-3, Arginine, biological studies 77-92-9, Citric acid, biological studies 79-14-1, biological studies 83-46-5 83-48-7 87-69-4, biological studies 99-50-3 99-96-7, biological studies 110-15-6, Succinic acid, biological studies 110-17-8, 2-Butenedioic acid (E)-, biological studies 121-33-5 121-34-6, Vanillic acid 127-22-0, Taraxerol 134-96-3, Syringic aldehyde 138-59-0 144-62-7, Oxalic acid, biological studies 147-81-9, Arabinose 147-85-3, Proline, biological studies 149-91-7, biological studies 154-23-4, (+)-Catechin 328-50-7, .alpha.-Ketoglutaric acid 458-36-6, Coniferyl aldehyde 465-02-1, Germanicol 473-81-4 474-40-8, Citrostadienol 474-62-4 480-10-4, Astragalin 480-17-1 **482-35-9, Quercetin** -3-glucoside 484-39-9 487-36-5, Pinoresinol 490-46-0, (-)-Epicatechin 491-52-1 512-69-6, Raffinose 520-14-9 520-17-2, Leucopelargonidine 530-57-4, Syringic acid 545-47-1 548-29-8, Isolariciresinol 559-70-6, .beta.-Amyrine 580-72-3, Matairesinol 685-73-4, Galacturonic acid 970-73-0, (+)-Gallocatechin 970-74-1, (-)-Epigallocatechin 1059-14-9 1257-08-5, (-)-Epicatechingallate 2955-23-9 4206-58-0, Sinapic aldehyde 6556-12-3, D-Glucuronic acid 6915-15-7 9000-69-5, Pectin 9005-53-2, Lignin, biological studies 16910-32-0, Obtusifoliol 18594-58-6 29018-62-0 62267-81-6

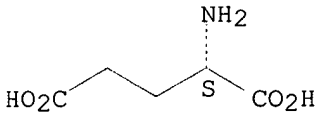
64190-81-4 64190-82-5 80043-59-0, Oxymatairesinol
RL: BIOL (Biological study)
(ethanol addiction inhibition with compn. contg.)
IT **56-45-1, Serine,** biological studies **56-86-0,**
L-**Glutamic acid,** biological studies **482-35-9**
, **Quercetin**-3-glucoside
RL: BIOL (Biological study)
(ethanol addiction inhibition with compn. contg.)
RN 56-45-1 HCAPLUS
CN L-Serine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



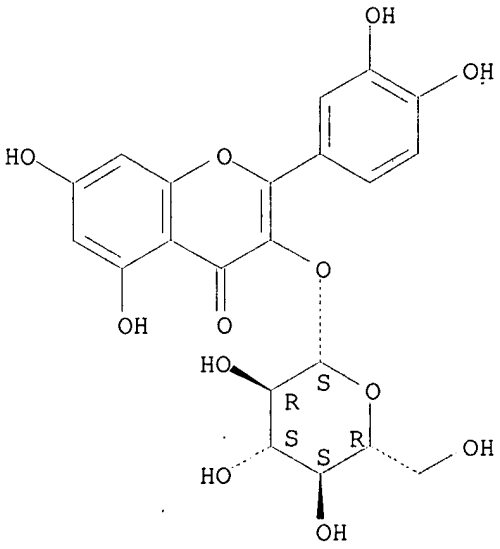
RN 56-86-0 HCAPLUS
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 482-35-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3-(.beta.-D-glucopyranosyloxy)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L78 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN **1989:121412** HCAPLUS
DN **110:121412**
TI Pharmaceuticals containing leucoanthocyans for the treatment of alcoholism
IN Brekhman, I. I.; Bulanov, A. E.; Polozhentseva, M. I.; Mudzhiri, L. A.;

Alkhazashvili, G. G.; Kalatozishvili, E. I.; Dardymov, I. V.; Bezdetko, G. N.; Khasina, E. I.

PA Institute of Biology of the Sea, Vladivostok, USSR; Scientific-Research Institute of Horticulture, Viticulture, and Wine Making

SO Ger. Offen., 21 pp.
CODEN: GWXXBX

DT Patent

LA German

IC ICM A61K031-70
ICS A23L002-26; C12G003-00; A61K031-19; A61K031-195; A61K031-11; A61K031-05; A61K031-35; A61K035-78; A61K031-725; A61K031-215; A61K031-575

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 4

FAN.CNT 1

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
PI	DE 3641495	A1	19880609		DE 1986-3641495	19861204	<--
	DE 3641495	C2	19910704				
	FR 2607391	A1	19880603		FR 1986-16754	19861201	<--
	FR 2607391	B1	19890331				
	US 4808574	A	19890228		US 1986-937606	19861203	<--
	WO 8911284	A1	19891130		WO 1988-SU127	19880526	<--
	W: JP						
	JP 03501126	T2	19910314		JP 1988-500830	19880526	<--
PRAI	DE 1986-3641495		19861204	<--			
	WO 1988-SU127		19880526	<--			

AB A pharmaceutical for the treatment of pathol. alc. addiction contains leucoanthocyans 219-270, catechins 153-187, flavonols 81-99, lignin 68-83, reducing saccharides 216-264, pectin 18-22, free amino acids 27-33, org. acids 36-44, sterols 4.5-5.5, methylsterols 1.35-1.65, dimethylsterols 1.98-2.42, lignans 13.5-16.5, lignan glycosides 9-11, phenolcarboxylic acids 13.5-16.5, phenolaldehydes 4.5-5.5, and alkyl ferulates 4.5-5.5 mg/g. Alc. rats received drinking water contg. 15% EtOH and 1 mL/50 mL of the above mixt. for 13 wk and were then kept abstinent for 10 days; in the abstinent animals the deprivation occurred without alc. withdrawal symptoms. Animals receiving the above mixt. and free to choose water or 15% EtOH-contg. water, decreased their EtOH consumption by 100% after the deprivation period, whereas alc. consumption increased in the control.

ST ethanol addiction treatment leucoanthocyans

IT Fatty acids, biological studies
Glycerides, biological studies
RL: BIOL (Biological study)
(of liver, alcoholism treatment with pharmaceuticals contg. leucoanthocyans in relation to)

IT Amino acids, biological studies
Flavanols
Lignans
RL: BIOL (Biological study)
(pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT Leucoanthocyanins
RL: BIOL (Biological study)
(pharmaceuticals, for treatment of alcoholism)

IT Lignans
RL: BIOL (Biological study)
(glycosides, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT Steroids, biological studies
RL: BIOL (Biological study)
(hydroxy, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT Steroids, biological studies

RL: BIOL (Biological study)
(hydroxy Me, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT **Glycosides**
RL: BIOL (Biological study)
(lignan, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT Acids, biological studies
RL: BIOL (Biological study)
(org., pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT **Flavonoids**
RL: BIOL (Biological study)
(oxo hydroxy, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT Aldehydes, biological studies
Carboxylic acids, biological studies
RL: BIOL (Biological study)
(phenolic, pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

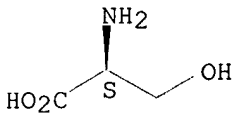
IT 64-17-5, Ethanol, biological studies
RL: BIOL (Biological study)
(addiction, treatment of, pharmaceuticals contg. leucoanthocyans for)

IT 50-81-7, Ascorbic acid, biological studies 50-99-7, D-Glucose, biological studies 56-40-6, Glycine, biological studies 56-41-7, Alanine, biological studies **56-45-1, Serine**, biological studies 56-84-8, L-Aspartic acid, biological studies **56-86-0, Glutamic acid**, biological studies 56-87-1, Lysine, biological studies 56-89-3, Cystine, biological studies 57-48-7, D-Fructose, biological studies 57-50-1, Saccharose, biological studies 58-86-6, Xylose, biological studies 60-18-4, Tyrosine, biological studies 61-90-5, Leucine, biological studies 63-68-3, Methionine, biological studies 63-91-2, Phenylalanine, biological studies 71-00-1, Histidine, biological studies 72-18-4, Valine, biological studies 72-19-5, Threonine, biological studies 73-32-5, Isoleucine, biological studies 74-79-3, Arginine, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 83-46-5, .beta.-Sitosterin 83-48-7, Stigmasterin 87-69-4, Tartaric acid, biological studies 99-96-7, p-Hydroxybenzoic acid, biological studies 110-15-6, Succinic acid, biological studies 110-17-8, Fumaric acid, biological studies **117-39-5 117-39-5D**, glycosides 121-33-5, Vanillin 121-34-6, Vanillic acid 134-96-3, Syringic aldehyde 138-59-0, Shikimic acid 144-62-7, Oxalic acid, biological studies 147-81-9, Arabinose 147-85-3, Proline, biological studies 149-91-7, Gallic acid, biological studies 154-23-4, Catechin 303-38-8 328-50-7, .alpha.-Ketoglutaric acid 458-36-6 465-02-1 473-81-4, Glyceric acid 474-40-8, Citrostadienol 474-62-4, Campesterin 480-10-4, Astragalin 487-36-5, Pinoresinol 490-46-0, (-)Epicatechin 512-69-6, Raffinose 520-18-3D, glycosides 529-44-2D, glycosides 530-57-4 530-59-6 545-47-1, Lupeol 548-29-8 559-70-6, .beta.-Amyrin 580-72-3, Matairesinol 638-95-9, .alpha.-Amyrin 685-73-4, Galacturonic acid 970-73-0, Gallocatechin 970-74-1, (-)Epigallo catechin 1059-14-9, Taraxasterol 1257-08-5, (-)Epicatechin gallate 2955-23-9 6556-12-3, Glucuronic acid 6915-15-7, Malic acid 9000-69-5, Pectin 16910-32-0, Obtusifoliol 18594-58-6 20268-71-7, Hydroxymatairesinol 29018-62-0 62267-81-6 64190-81-4, Octadecanol ferulate 64190-82-5
RL: BIOL (Biological study)
(pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)

IT 480-17-1, Leukocyanidine 491-52-1 520-17-2
RL: BIOL (Biological study)
(pharmaceuticals, for treatment of alcoholism)

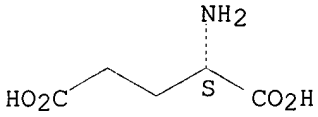
IT **56-45-1, Serine,** biological studies **56-86-0, Glutamic acid,** biological studies **117-39-5 117-39-5D,** glycosides
RL: BIOL (Biological study)
(pharmaceuticals contg. leucoanthocyans and, for treatment of alcoholism)
RN 56-45-1 HCAPLUS
CN L-Serine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

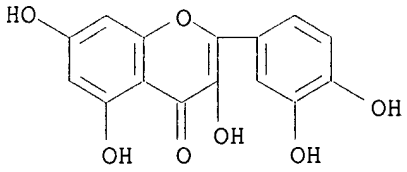


RN 56-86-0 HCAPLUS
CN L-Glutamic acid (9CI) (CA INDEX NAME)

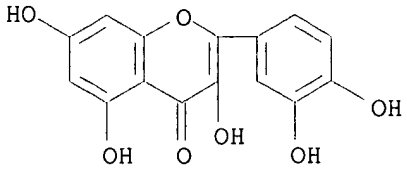
Absolute stereochemistry.



RN 117-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)



RN 117-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dihydroxyphenyl)-3,5,7-trihydroxy- (9CI) (CA INDEX NAME)



L78 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS
AN **1985:59554** HCAPLUS
DN **102:59554**
TI Tobacco filler blends and smoking articles containing them
IN Teng, Daniel M.
PA Morris, Philip, Inc., USA
SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW

DT Patent
LA English
IC A24B015-10; A24B013-00; A24B015-12; A24B003-08; A24D001-00
CC 11-7 (Plant Biochemistry)
FAN.CNT 1

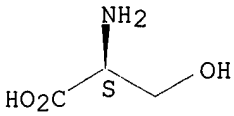
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 110693	A1	19840613	EP 1983-307221	19831125 <--
	EP 110693	B1	19881005		
	R: CH, DE, GB, LI, NL				
	AU 8321054	A1	19840531	AU 1983-21054	19831108 <--
	AU 573189	B2	19880602		
PRAI	US 1982-444928		19821126 <--		

AB A novel smoking tobacco is comprised of an air-cured bright tobacco harvested by stalk cutting, priming, or a combination of partial priming followed by stalk cutting, contains total reducing sugars 0-6, chlorogenic acid 0-0.4, **rutin** 0-0.2, hot water-sols. .apprx.45-55, total ash 12-26%, combined protein and threonine 0-1.0, combined aspartic acid and asparagine 0.5-1.7, and combined **glutamic acid** and glutamine 0.5-1.6 mg/g (all measurements on a dry wt. basis). Such tobacco, when formulated as a smoking article, provides an aroma and taste of a blended tobacco and may be substituted in whole or in part for burley tobacco in tobacco blends while substantially maintaining the subjective qualities of the burley tobacco and yet, as compared to the burley tobacco-contg. blends, provides a reduced NO content in the smoke.

ST tobacco filler smoking compn property
IT Alkaloids, biological studies
Amino acids, biological studies
Carboxylic acids, biological studies
Mineral elements
RL: BIOL (Biological study)
(of air-cured bright tobacco, smoking filler in relation to)
IT Aldehydes, biological studies
RL: BIOL (Biological study)
(of tobacco smoke, from air-cured bright tobacco)
IT Tobacco smoke and smoking
(tobacco filler blends for)
IT Carbohydrates and Sugars, biological studies
RL: BIOL (Biological study)
(reducing, of air-cured bright tobacco, smoking filler in relation to)
IT 50-99-7, biological studies 56-40-6, biological studies 56-41-7, biological studies **56-45-1**, biological studies 56-84-8, biological studies 56-85-9, biological studies **56-86-0**, biological studies 56-87-1, biological studies 57-48-7, biological studies 57-50-1, biological studies 61-90-5, biological studies 63-91-2, biological studies 64-19-7, biological studies 70-47-3, biological studies 72-18-4, biological studies 72-19-5, biological studies 73-32-5, biological studies 77-92-9, biological studies 79-09-4, biological studies 107-92-6, biological studies 110-16-7, biological studies 144-62-7, biological studies 147-85-3, biological studies **153-18-4** 327-97-9 7440-70-2, biological studies 7664-41-7, biological studies 7727-37-9, biological studies 14797-55-8, biological studies
RL: BIOL (Biological study)
(of air-cured bright tobacco, smoking filler in relation to)
IT 54-11-5 74-90-8, biological studies 630-08-0, biological studies 10102-43-9, biological studies
RL: BIOL (Biological study)
(of tobacco smoke, from air-cured bright tobacco)
IT **56-45-1**, biological studies **56-86-0**, biological studies **153-18-4**
RL: BIOL (Biological study)
(of air-cured bright tobacco, smoking filler in relation to)

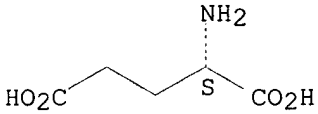
RN 56-45-1 HCAPLUS
CN L-Serine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



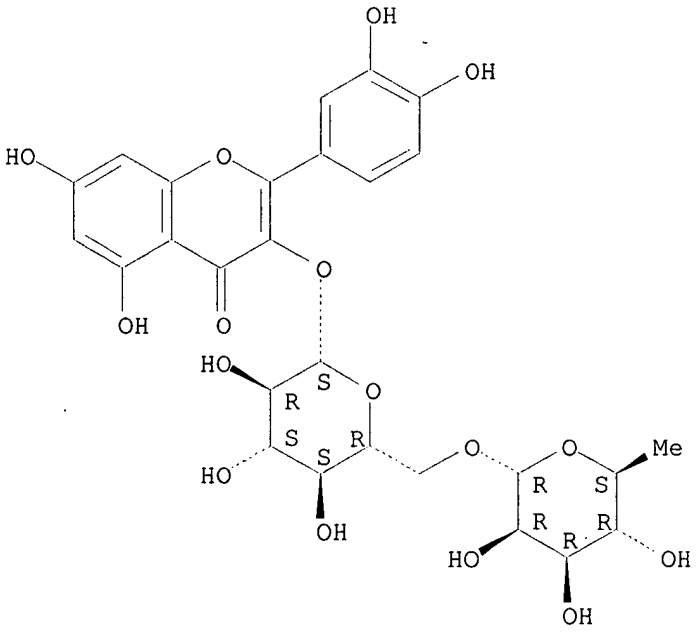
RN 56-86-0 HCAPLUS
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 153-18-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-[[6-O-(6-deoxy-.alpha.-L-mannopyranosyl)-.beta.-D-glucopyranosyl]oxy]-2-(3,4-dihydroxyphenyl)-5,7-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



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FILE LAST UPDATED: 15 AUG 2002 <20020815/UP>
MOST RECENT DERWENT UPDATE 200252 <200252/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> SLART (Simultaneous Left and Right Truncation) is now
available in the /ABEX field. An additional search field
/BIX is also provided which comprises both /BI and /ABEX <<<

>>> Implied proximity does currently not work in /BIX
Searches in this field may be affected <<<

>>> The BATCH option for structure searches has been
enabled in WPINDEX/WPIDS and WPIX <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

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PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

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L40 ANSWER 1 OF 4 WPIX (C) 2002 THOMSON DERWENT
AN **2000-365384** [31] WPIX
DNC **C2000-110282**
TI Composition for treating neurological and pathopsychological diseases comprises **phosphatidylserine** compound, methyl transporter and methyl and/or methylene donor compound.
DC B02 B05
IN BUCHHOLZ, H; MEDUSKI, J D
PA (MERE) MERCK PATENT GMBH
CYC 88
PI WO 2000025793 A1 20000511 (200031)* EN 19p A61K031-66
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9962022 A 20000522 (200040) A61K031-66
EP 1124559 A1 20010822 (200149) EN A61K031-66
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
ADT WO 2000025793 A1 WO 1999-EP7688 19991013; AU 9962022 A AU 1999-62022 19991013; EP 1124559 A1 EP 1999-948982 19991013, WO 1999-EP7688 19991013
FDT AU 9962022 A Based on WO 200025793; EP 1124559 A1 Based on WO 200025793
PRAI US 1998-106230P 19981030
IC ICM A61K031-66
ICS A61K031-198; A61K031-505; A61K045-06; A61P025-28
ICI A61K031:505; A61K031:198; A61K031-66
AB WO 200025793 A UPAB: 20000630
NOVELTY - Composition comprises one or more active components comprising:
(1) one or more **phosphatidylserine** compounds;
(2) one or more methyl transporters and
(3) one or more methyl and/or methylene donors, but not phosphatidyl **serine** compounds and methyl transporting compounds.
The composition optionally contains one or more nutritional substances, solid, liquid and/or semi-liquid excipients or auxiliaries.
ACTIVITY - Neuroprotective; muscular.
MECHANISM OF ACTION - None given.

USE - Useful for preventing and treating transmethylation disorders, preferably neurological and/or pathopsychological diseases associated with hyperhomocysteinemia, particularly depression, premature old age and senility, dementia, Pick's disease, metabolic myelopathy, peripheral neuropathy, neural tube defects in the unborn e.g. anencephaly, spina bifida and encephalocoele, gait disturbance and muscle weakness.

ADVANTAGE - The composition reduces homocysteine levels and improves the transmethylation process.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B05-B01P; B06-D09; B10-A22; B10-B02D; B10-B02H; B10-B02J; B14-J01; B14-J01A1; B14-J01A4; B14-J05; B14-N16
TECH UPTX: 20000630

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred components: (2) Comprises **dihydrofolic** acid, **tetrahydrofolic** acid, 5-methyl- or 5-**formyltetrahydrofolic** acid, 10-**formyltetrahydrofolic** acid or 5,10-methylene or 5,10-**methenyltetrahydrofolic** acid, preferably L- 5-**methyltetrahydrofolic** acid.

(3) Comprises **betaine, dimethylglycine, sarcosine,** methionine, S-adenosylmethionine, choline or **serine.**

L40 ANSWER 2 OF 4 WPIX (C) 2002 THOMSON DERWENT
AN **2000-365365** [31] WPIX
DNC **C2000-110263**
TI Compositions for treating transmethylation disorders, especially cardiovascular diseases e.g. atherogenic and thrombogenic diseases, comprise methyl and methylene donors, methyl transporters and bioflavonoids.
DC B02
IN BUCHHOLZ, H; MEDUSKI, J D
PA (MERE) MERCK PATENT GMBH
CYC 88
PI WO 2000025764 A2 20000511 (200031)* EN 16p A61K031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9964709 A 20000522 (200040) A61K031-00
BR 9914815 A 20010703 (200141) A61K031-00
EP 1124548 A2 20010822 (200149) EN A61K031-205
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
KR 2001080339 A 20010822 (200213) A61K031-205
ADT WO 2000025764 A2 WO 1999-EP7689 19991013; AU 9964709 A AU 1999-64709 19991013; BR 9914815 A BR 1999-14815 19991013, WO 1999-EP7689 19991013; EP 1124548 A2 EP 1999-952559 19991013, WO 1999-EP7689 19991013; KR 2001080339 A KR 2001-705262 20010427
FDT AU 9964709 A Based on WO 200025764; BR 9914815 A Based on WO 200025764; EP 1124548 A2 Based on WO 200025764
PRAI US 1998-106205P 19981030
IC ICM A61K031-00; A61K031-205
ICS A23L001-30; A23L001-302; A23L001-305; A61K031-195; A61K031-35; A61K031-505
AB WO 200025764 A UPAB: 20000630

NOVELTY - Compositions for treating transmethylation disorders comprise methyl and methylene donors, methyl transporters and bioflavonoids as active ingredients and optionally, one or more nutritional substances, solid, liquid and/or semiliquid excipients or auxiliaries.

DETAILED DESCRIPTION - Compositions comprise one or more active

ingredients and optionally, one or more nutritional substances, solid, liquid and/or semiliquid excipients or auxiliaries. The active ingredient comprises:

(a) a component (A) comprising one or more compounds selected from methyl and methylene donors;

(b) a component (B) comprising one or more methyl transporters; and

(c) a component (C) comprising one or more bioflavonoids.

An INDEPENDENT CLAIM is also included for the use of one or more compounds selected from methyl and methylene donors, one or more transporters and one or more bioflavonoids in the preparation of a composition for treating transmethylation disorders.

ACTIVITY - Cardiant; antiarteriosclerotic; thrombolytic; hypotensive; cerebroprotective.

USE - For treating and preventing transmethylation disorders, cardiovascular diseases, atherogenic and/or thrombogenic diseases, diseases associated with hyperhomocysteinemia; premature occlusive arterial disease, severe vascular disease in infancy and childhood, progressive arterial stenosis, intermittent claudication, renovascular hypertension, ischemic occlusion, cerebral occlusive arterial disease, occlusive peripheral arterial disease, premature death due to thromboembolic disease and/or ischemic disease (all claimed).

ADVANTAGE - The compositions are more effective than prior art preparations.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B06-A01; B06-D09; B10-A22; B10-B02H; B10-B02J; B12-M11B; B14-F01; B14-F02; B14-F04; B14-N16
TECH UPTX: 20000630

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Component (C) comprises one or more compounds selected from mono-, di-, or triglycoside bioflavonoids containing the aglycone **quercetin**.

L40 ANSWER 3 OF 4 WPIX (C) 2002 THOMSON DERWENT
AN **1999-327123** [27] WPIX
DNC **C1999-096787**
TI Preventing and treating migraine headaches.
DC B05
IN ALLOCCA, J A
PA (ALLO-N) ALLOCCA TECH INC
CYC 82
PI WO 9923881 A1 19990520 (199927)* EN 21p A01N043-38
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
US 5939076 A 19990817 (199939) A61K009-00
AU 9913985 A 19990531 (199941) A01N043-38
GB 2348133 A 20000927 (200051) A61K031-405
ADT WO 9923881 A1 WO 1998-US24041 19981110; US 5939076 A US 1997-968358 19971112; AU 9913985 A AU 1999-13985 19981110; GB 2348133 A WO 1998-US24041 19981110, GB 2000-11925 20000517
FDT AU 9913985 A Based on WO 9923881; GB 2348133 A Based on WO 9923881
PRAI US 1997-968358 19971112
IC ICM A01N043-38; A61K009-00; A61K031-405
ICS A01N033-02; A61K009-48; A61K031-198
ICA A61P025-06
ICI A61K031-405, A61K031:198; A61K031-198, A61K031:405
AB WO 9923881 A UPAB: 19990714

NOVELTY - Preventing or treating a migraine headache comprises daily dietary supplementation with serotonin and norepinephrine precursors so

that levels of serotonin and norepinephrine are increased.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a daily supplement which comprises:

(1) a first formulation comprising a serotonin precursor, a methyl donor source, a choline source, a niacin source, a carbohydrate and vitamin B6 and

(2) a second formulation comprising a norepinephrine precursor, a vitamin C source and a copper source.

Folic acid, a bioflavanoid, proanthocyanidins, a source of calcium and/or a source of magnesium are contained in at least one formulation.

ACTIVITY - Antimigraine.

A male patient (aged 48) suffering migraine headaches twice a week for 40 years began taking the daily dietary supplement of serotonin and norepinephrine precursors along with diet adjustment and suffered no further migraine attacks.

MECHANISM OF ACTION - Serotonin and norepinephrine level elevators.

USE - Useful for preventing or alleviating migraine headaches.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: B06-D01; B10-B02E; B14-C01
TECH UPTX: 19990714

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred method: The method comprises administering L-tryptophan or L-5-hydroxytryptophan as the serotonin precursor and L-tyrosine as the norepinephrine precursor and a bioflavanoid, preferably **quercetin**, **rutin** or hexperidin.

Preferred Composition: The first formulation comprises (in mg): 1100 magnesium aspartate, 500 anhydrous dextrose, 180 L-5-hydroxytryptophan, 175 calcium ascorbate, 170 inositol hexanicotinate, 170 pyridoxine hydrochloride, 100 choline citrate and 100 **dimethylglycine**. The second formulation comprises (in mg): 500 quercitin, 800 L-tyrosine, 200 calcium ascorbate, 200 magnesium aspartate, 200 calcium citrate, 100 proanthocyanidins, 20 copper sebacate and 400 **folic** acid.

L40 ANSWER 4 OF 4 WPIX (C) 2002 THOMSON DERWENT
AN **1997-279778** [25] WPIX
DNC **C1997-089883**
TI Treatment and prevention of sickle cell crisis - comprises administration of vitamin, mineral and micronutrient formulations as sustained release compositions.
DC B05
IN LOCKETT, C G; LOCKETT, C
PA (LOCK-I) LOCKETT C G; (LOCK-I) LOCKETT C
CYC 75
PI US 5626884 A 19970506 (199725)* 5p A61K033-32
WO 9850051 A1 19981112 (199851)# EN A61K033-32
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
AU 9729932 A 19981127 (199915)# A61K033-32
ADT US 5626884 A US 1995-516737 19950818; WO 9850051 A1 WO 1997-US7122 19970505; AU 9729932 A AU 1997-29932 19970505, WO 1997-US7122 19970505
FDT AU 9729932 A Based on WO 9850051
PRAI US 1995-516737 19950818; WO 1997-US7122 19970505; AU 1997-29932 19970505
IC ICM A61K033-32
ICS A61K031-07; A61K031-34; A61K031-355; A61K031-44; A61K031-51; A61K031-70; A61K033-04; A61K033-06; A61K033-24; A61K033-36; A61K035-78

AB US 5626884 A UPAB: 19970619
Treating or preventing sickle cell crisis in a person having sickle cell disease comprises administering a cumulative daily dosage of vitamin A (8250-250000 I.U.), vitamin B-1 (25-1000 mg), vitamin B-2 (25-1000 mg), vitamin B-6 (25-1000 mg), vitamin C (25-1000 mg), niacinamide (25-1000 mg), para-aminobenzoic acid (25-1000 mg), pantothenic acid (25-1000 mg), choline bitartrate (25-1000 mg), inositol (25-1000 mu g), vitamin B-12 (25-1000 mu g), biotin (25-1000 mu g), vitamin D (100-4000 I.U.), **folic** acid (100-4000 mu g), vitamin E (25-1000 I.U.), **rutin** (8.25-250 mg), citrus bioflavonoid complex (8.25-250 mg), **betaine** hydrochloride (8.25-250 mg), iron (8.25-250 mg), hesperidin complex (1.25-50 mg), calcium (10-400 mg), magnesium (5-100 mg), zinc (5-100 mg), potassium (3.75-150 mg), manganese (1.5-60 mg), iodine (37.5-1500 mu g), chromium (3.75-150 mu g) and selenium (2.5-100 mu g).
ADVANTAGE - The medication may be administered outside a critical care environment. This allows persons suffering from sickle cell disease to lead more productive, normal lives. The constant threat of crisis onset is dramatically reduced, which contributes to greater mental and emotional confidence.
Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B03-L; B05-A01A; B05-A01B; B05-A03; B05-B02C; B05-C07; B06-A01; B06-D09; B06-F03; B10-A07; B10-A22; B10-B02A; B10-C02; B14-F03

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(FILE 'HOME' ENTERED AT 09:54:42 ON 19 AUG 2002)
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E BETAINE/DCN
E E3+ALL
L2 389 S E2 OR 0829/DRN
L3 2 S E4
L4 29 S E6
E DIMETHYLGLYCINE/DCN
E E4+ALL
L5 40 S E2
E SARCOSINE/DCN
E E3+ALL
L6 101 S E2
L7 12 S E4
L8 1 S E6
L9 2 S E8
E SERINE/DCN
E E3+ALL
L10 1350 S E2 OR 1654/DRN
L11 134 S E4
L12 32 S E6
L13 228 S E8
L14 12857 S L1-L13
L15 1161 S HYPERIN? OR ISOQUERCETIN? OR QUERCETIN? OR ISOQUERCITRIN? OR
E HPERIN/DCN
E HYPERIN/DCN
E E4+ALL
L16 8 S E2
E ISOQUERCETIN/DCN
E E4+ALL
L17 28 S E2

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L18          25 S ISOQUERCITRIN?
                E QUERCIMERITRIN/DCN
                E SPIRNAEOSID/DCN
                E RUTIN/DCN
                E E3+ALL
L19         284 S E2 OR 1179/DRN
L20           7 S (RA1RX6 OR RAOICK OR RA1RX7 OR RA1RX8)/DCN
L21          25 S L14 AND L15-L20
                E DIHYDROFOLIC ACID/DCN
                E E4+ALL
L22          10 S E2
                E TETRAHYDROFOLIC ACID/DCN
                E E3+ALL
L23          21 S E2
                E GLUTAMIC ACID/DCN
                E E3+ALL
L24        2292 S E2 OR 0116/DRN
L25         708 S E6 OR 1142/DRN
L26         137 S E8
L27          10 S E10
L28          35 S E12
L29         344 S E14
                E METHYL TETRAHYDROFOL/DCN
                E METHYLTETRAHYDROFOL/DCN
L30           9 S L21 AND L22-L29
L31           5 S L21 AND ?FOLIC?
L32           1 S L21 AND ?FOLAT?
L33          13 S L30-L32
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L34         269 S E1 OR 0971/DRN
L35           1 S L21 AND L34
L36           2 S RA0ICK/DCN AND L21
L37          13 S L33,L35,L36
L38           2 S RA0055/DCN AND L21
L39          13 S L37,L38
                SEL DN AN 4 5 7 8 L39
L40           4 S L39 AND E1-E8

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